**Timothy Winans (Day 1)**

**Date: 5 December 2011 (Monday)**

5th Grade Room 306

Daily Schedule

8:15-8:30 We will watch a brain Pop video on migration to pull them into the days studies on migration.

The KWL will center around questioned (after) we watch the video on animal/insect migration.

# Migration

Question: Why do birds come and go with the seasons? In this BrainPOP movie, Tim (character) explains the natural phenomenon of migration, the instinctive movement of large groups of animals. The students will learn about the three different reasons animals have for moving, and why these movements tend to take place at the same time every year. You'll also find out about other kinds of migrations, like the nomadic movement of elephants, and why locusts stay in one place till the food runs out. Find out how animals know where they're headed, when to take off, and what kind of environmental clues animals use to calibrate their internal clocks. Plus, find out why migration's not just for the birds, either! Look, the butterflies are migrating!

We will move to questions about why “people” have migrated and write them down for further class discussion.

**Activity one** *•.***Reasons to migrate**

You could introduce the lesson by conducting a brainstorming activity around the words

‘immigration’ and ‘emigration’. What do students associate with these two terms? Are they

perceived very differently? Is one ‘good’ and the other ‘bad’? Compare them with the more

neutral term ‘migration’. Introduce the story by saying there are many reasons why migration

occurs but there is always a story for everyone involved.

Ask students to read *To leave or stay?* - that is the question*. (attachment Story)* Decide how to do this according to the ability and needs of the class. If necessary, check their understanding of

the story by asking comprehension-type questions. Then discuss together some of the

issues raised by the story. It is often helpful to get students to talk together in small groups

about an issue before feeding back to you and the rest of the class.

Consider what kinds of problems might be forcing the family to leave their home. Ask

students in pairs to write down as many reasons as they can separately on small pieces of

paper. Ask pairs to show their answers to another pair. In fours, they should compile a larger

list. They then should consider whether all reasons to leave are equally valid. Alternatively,

you can give students the Reasons to migrate cards to consider which they think are the

most likely reasons why people leave.

Ask students how the situations forcing people to leave might be improved. Whose

responsibility should it be to address the problems?

8:30-8:45 Preview agenda do the problem of the day; take attendance, and lunch count

8:45-9:35 Specials: **Day 1** Art with cutting (Thank you cards to create

for the Interview on day 1)

Day 2 P.E. with Nguyen

(mini-lesson provided)

Day 3 Music with Nakamura

(mini-lesson provided).

9:35-10:45 Math and Science Problem Solving Expanded Mini-Lesson:

The coming of electrical power to the farm at the end of the 1930s brought vast changes across mid-America. The introduction of power began slowly. Nebraska farm families used Kerosene lamps for light.

Ask your students, "What problems would they encounter today if the power went off for a week?" Record responses in their journal, next ask, "What they think their family would do without power for a week?" "What problems would they need to solve living on a farm or in town?"

Discuss the issues in class and at home, record ideas in their journal. Ask the class to propose ideas on how they could solve these problems.

Three short videos will be shown about how electricy was brought to rural locations - <http://www.livinghistoryfarm.org/farminginthe30s/life_08.html>

There are many correct ways to set up an investigation (experiment). Encourage your students to think of as many ways as possible to conduct an investigation. Allow time for students to discuss their plans and conduct their investigations. Students need to record their ideas, plans, and research in their journal. Click here for journal activity and rubric. Remember a student's explanation and the conclusion will provide a good opportunity for assessment. Students describe how they will set up the investigation and what they expect to learn from it. Identify the constants and the variable in the investigation. The controls of an experiment are what you keep the same (constant) in the experiment. A variable is what you change in the experiment. (Should limit variables to one if possible.)

**POSSIBLE INVESTIGATION:**

**Preparatory Set:**

Batteries, candles, kerosene and ice are selling out in your community. People either didn't have enough or are using them up during the power outage. I told my Dad about a battery experiment we did at school to discover which battery provided the most minutes of operation per penny. How did you prove which type of battery was the best? I can purchase a regular, heavy-duty, alkaline or rechargeable battery here at the local hardware store, however, without power we cannot recharge them so that's out for now.

**Question/Problem:**

Which type of battery, regular, heavy duty or alkaline, will cost the least to operate per minute?  
(The purpose of this investigation is to find the cost of operating different types of dry cell batteries.)

**Hypothesis:**

Example of a hypothesis:

The heavy-duty battery will cost the least per minute of operation.

Student reasoning:

They label them heavy duty in the store so they must be the strongest. (Journal responses are an excellent way for you to view the thought processes your students are using to reach their explanations.)

Procedure

THE TEACHER MUST APPROVE ALL INVESTIGATIONS BEFORE YOU BEGIN THE EXPERIMENT.

A description of the plan telling how the investigation will be carried out. List step-by-step the way the investigation will be performed, include all controls and the variables to be tested.  
  
You need three or four flashlight D batteries. (New flashlights would add an additional control.) Two D batteries for each flashlight used in the test. Three types of batteries, regular, heavy-duty, and alkaline, made by the same manufacturer. Make sure each flashlight has a new bulb.

**Controls:**

1. The flashlights used in the test.  
2. A new bulb for each flashlight.  
3. The same size of battery.  
4. The location of test.  
5. Same brands or manufacturer.

**Variable:**

The type of battery to be tested.  
(Regular; heavy duty; and alkaline)

NOTE: Record the cost of each battery purchased for the test. If you purchase them from different places calculate an average cost in cents.

Procedure

THE TEACHER MUST APPROVE ALL PROCEDURES BEFORE TESTING BEGINS IN ORDER TO PROTECT THE STUDENT AND MAKE SURE THE STUDENTS ARE ON THE CORRECT PATH.

It is a good idea to make your signature a requirement before testing starts.

List step-by-step the way you plan to set up your experiment.

**Possible experimental procedure:**

* Place two regular batteries into one of the flashlights, two heavy-duty batteries into the second flashlight, and two alkaline batteries into the third flashlight.
* Place new bulbs into all three flashlights.
* Record the time and turn on the flashlight.
* Check the flashlights every five minutes. As soon as you notice the bulb beginning to dim check the flashlight more often for best results.
* You could add some technology to the project by videotaping the flashlights. The tape would allow continual coverage of the battery investigation (experiment).

**Note:**

* + When the experiment was performed the above experiment on one brand of battery. The following data was collected:
  + regular batteries ran for 10 hours
  + heavy-duty batteries ran for 14 hours
  + alkaline batteries ran for just over 30 hours.

If you turn the flashlights on and off just make sure you record all the times. Turning them on and off will impact the results but only slightly.

* Record the time the bulb stops glowing and turn the flashlight off. CAUTION: Remove the batteries making sure they are disposed of safely. This is a great place to teach about proper disposal of materials.
* Calculate how many minutes each set of batteries lasted using all starting and stopping times.
* Repeat the experiment or if several groups tested the same batteries you are ready to calculate an average. Ask students "why" we need to retest the batteries or take a class average of the data collected. We hope to make sure the results were not just an accident so more data helps to support the conclusion.

**Observations/Sketch/Photo/ Journal:**

Draw and/or write about your experiment telling your observations. Since the observations will be in your journal you should have enough space. Place data in a chart or table and then display it graphically.

**NOTE:**

Teach graphing skills before you ask the students to graph their results from this experiment.

**Data:**

Graph all data collected in the experiment and write your conclusion based on what you have discovered.

**Table:**

|  |  |  |
| --- | --- | --- |
| Type of Battery Tested | Minutes of Operation | Cost of Two Batteries |
|  |  |  |
|  |  |  |
|  |  |  |

Make three graphs:

1. Operation time on the y-axis in minutes, battery types on the x-axis, title would be average operation time in minutes.
2. Cost in cents on the y-axis, battery types on the x-axis, title would be cost of two batteries in cents.
3. Minutes of operation with time in cents on the y-axis, battery types on the x-axis, title would be minutes of operation penny. Formula: Minutes of operation per cent = Average operation time in minutes

Cost of two batteries in cents.

### Conclusion

Students write a sentence or two telling what they have proved or not proved from their discoveries in the investigation (experiment).

Next, do a post [KWL](http://www.livinghistoryfarm.org/farminginthe30s/lrResources/lrKWL.pdf) with students going to the pre KWL in their journal. Students should use a different colored marker so you can see the knowledge growth, for assessment, then do a class [KWL](http://www.livinghistoryfarm.org/farminginthe30s/lrResources/lrKWL.pdf) . Provided you use a different colored marker on the class KWL the students will be able to see what they have learned as a class. Journal a response as to what they want to now know and point out an experiment in the world of a scientist usually leads to more questions.

### Assessment Activity

Successful completion of the experiment will focus the student's ability to apply knowledge they have learned through the process of scientific inquiry. The KWL below will be opened through the computer as a link (it does work) and the rubric is an example so that the students can come with their own rubric.

1. [KWL Chart](http://www.livinghistoryfarm.org/farminginthe30s/lrResources/lrKWL.pdf) pre and post.
2. [Journal Assessment Rubric](http://www.livinghistoryfarm.org/farminginthe30s/lrResources/JournalAssess.pdf).

10:45-12:05 Integrated Language Arts

**Activity two • Who are my people?**

In the story the mother tells the man ‘Your place is here, with your people.’ He responds by

asking ‘Who are my people?’ Ask students in pairs to discuss the following questions:

What do you think the man means by asking ‘Who are my people?’? Is he rejecting his

nationality, discussing loyalty to a group, or possibly claiming a loyalty to wider

humanity?

Is he being selfish by wanting to leave his country?

Does he have a right to leave?

Does he have a duty/responsibility to stay?

Should he stay or go?

Answers can be shared as a class or in groups. You might show how differently this

situation could be viewed if students imagine the man is:

a brilliant scientist working on a cure for cancer

a business man who has made a fortune

the leader of a political party identified as an enemy of the state.

How do these different scenarios alter the way we see his migration? Students might be

asked to select one of these scenarios and write a continuation of the debate between the

three characters. This could be set as Journal homework. The best stories could be read to the

class or a wider audience.

12:05-12:45 Recess and lunch

12:45-1:00 Health

In earlier times, farmers developed many ways to use materials and equipment or invented ways to solve problems related to life on the farm. For example, adding animal waste to the soil is a natural process of organic waste decomposing which yields nutrients that enrich the soil.

What are the health hazards with handling animal waste? The class will work together to answer this question.

<http://www.sustainabletable.org/issues/waste/#health> We will go to this link on the overhead and read together **Animal Waste, the Environment, and Human Health.**

We will also visit:

* [Animal Waste from Factory Farms - US National Map.](http://www.scorecard.org/env-releases/aw/)  
  Summaries of animal waste production by state and county. (Environmental Defense Fund).

1:00-1:20 Preparing for your interview and discussion time:

1:30-2:15 (Mini Lesson Time)

* I will use the past KWL questions generated and add onto these by the mini lessons given (listed below). The questions will grow after the mini lessons and prior to the research actually taking place; the questions will come first. I will then ask the students “how” they will go about finding the answers to their questions through research. The students will look through the books and think of any additional questions they might have.

\*\* All of the information to the ONLINE sources will be on a server that I map to each computer so that the students (when they log on) will just have to click the link provided: [www.5thgradeonlinesources.com](http://www.5thgradeonlinesources.com) each folder will list the countries in which people migrated from (or) general migration factual online eBooks provided and loaded by (I) the teacher.

### Mini Lesson 1: Interview Preparation (attached on lesson plan)

### Mini Lesson 2: Interview questions to come up with to ask your family

* Mini Lesson 3: The mock interview (attached on lesson plan)
* Mini Lesson 4: The phone interview (attached on lesson plan)
* Mini Lesson 5: Closing the interview and writing “Thank You” Notes

Activity Extra: We will build a class definition of each on reference charts that will be on display until the unit has reached a conclusion. This will create a word wall for the students to scaffold off of.

2:15-2:50 (continue with Mini Lessons after the break).

* Mini Lesson 5: Math mini lesson - We will discuss maps: Students will compare and contrast modern day maps from maps of the past. I will have 2 model maps hanging up. The maps will cover a lot of ocean area and we will discuss the routes that explorers and people that have migrated to the U.S. took – also, why were these routes chosen. This mini-lesson used to demonstrate the lengths that people who migrated took to get to America. This lesson plan will continue until there is a full understanding assessed by the students explaining to the class how they came to the conclusion that they did. I will look over answers for common sense factors.
* **Conclusion:** The conclusion of this lesson (part 1 of 3) will tie into the next lesson – I will let my students know now that they have mastered the interview process and understand more about how migration effected their “past family historic. ” The students will understand that they will write more on the “why did people Migrate in the past and present” after researching migration more deeply tomorrow and the next few days. Day two will focus on researching and gathering facts from books, web sites and data collected in other ways to start to build and put together an oral history presentation. It will be a celebration of discussions and an open house.